An Investigation on Project Management Standard Practices in IT Organization

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Abstract. In many organizations, project management is no longer a separately identified function, but is entrenched in the overall management of the business. The typical project management environment has become a multi - project. Most of the project decisions require consideration of schedule, resource and cost concerns on other project work, necessitating the review and evaluation of multi-project data. Without good project management standard practices the organization very hard to reach their target. The research problem of this study is to assess how project management standard practices in the IT Organizations are using it. The research method employed was to first identify the best practices of project management, by focusing on generally accepted standards and practices are particularly effective in helping an organization achieve its objectives. It also requires the ability to manage projects in today's complex, fast-changing organizations, its people, processes and operating systems which all work together in a collaborative, integrated fashion.

1 Introduction

Project management is considered as an important element of certain domains including Information Technology (IT) and its main importance of the infrastructure of concern domain. Improvement in success of the project mainly depends on the proper management. Vague system understanding and improper documentation are the basic reasons for failure of any project which ultimately yields almost negligible productivity. Project management processes and techniques are used to coordinate resources to achieve predictable results. All projects need some level of project management. Meeting organizational objectives through project management also entails knowing which project to accept and the one to turn down. This is where many organizations miss the track, as Prioritizing and selecting project can a daunting task, (Rosacker, 2008). However, in spite of the odds, organizations also expect projects to be completed faster, cheaper, and with higher quality. The only way that these objectives can be met is through the use of effective project management processes and techniques. Consider the size, complexity, and other characteristics of your project, and build the right project management processes to effectively manage and control the project.

2 Background and Literature Review

Many organizations now days start to use a Project Management to carry some task to complete on a timely manner and effectively. In Project Management there are several processes to carry one and adhere. Project Management can be applied almost all divisions and sectors like education, industry, medical, development, Information Technology, construction and so on. There is a different way of handling projects and some follow best practices and lead the project to successful completion on time and

within the budget. In today's highly competitive business environment more and more organization involve in Project Management. Some companies' slow start to enroll in Project management path and some are established in Project Management.

Several of the functions of project management are definitely the work prerequisite, allocating resource needs, planning the implementation of work required, monitoring the movement of the work and taking action to unpredicted events that take place. In converse, project management is defined as the method of controlling the achievement of the project objectives, via the existing organizational structures and resources and handles the project by applying a compilation of tools and techniques without interrupting the company's normal process. This round of checking takes place about two weeks after the files have been sent to the Editorial by the Contact Volume Editor, i.e., roughly seven weeks before the start of the conference for conference proceedings, or seven weeks before the volume leaves the printer's, for post-proceedings. If SPS does not receive a reply from a particular contact author, within the timeframe given, then it is presumed that the author has found no errors in the paper. The tight publication schedule of LNCS does not allow SPS to send reminders or search for alternative email addresses on the Internet.

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2.1 Overview of Project Management

The most commonly accepted definition of a project is: "a temporary endeavor undertaken to create a unique result, product or service" (PMI, 2004). This definition implies an established objective, a defined life span with a beginning and an end, action to do or create something that has not been done before, and specific time, cost and performance requirement of constraints (Gray and Larson, 2000). Further additions to the definition incorporate the concepts of human, financial and material resources organized in a 'novel' way (Turner, 1999). Unique, novelty and change

create uncertainty; they also create complexity. Project management needs to balance competing claims on resources between different parts of the project, between the project and other projects and between the project and the organization. An environment of uncertainty and complexity makes achieving this balance more difficult; the ability to navigate through this environment is what really defines successful project management, not just controlling time, cost and quality (Turner and Muller, 2003).

Project Management emergence as a discipline during the last half of the 19th century has been attributed as follow-on to Fredrick Taylor's work related to introduction of scientific practices to industry and management and subsequently companies started applying scientific values to employment practices and to the industry as a whole. In the 20th century, as technology and industry became ever more difficult, project management began to grow as an activity distinct from general business management. Project management is recognized to be the key enabler of business change and a vital contributor to future business success (Whitty, 2009). Project Management can be defined as "the application of knowledge, skills, tools and techniques to meet the needs and expectations of stakeholders for a project". A project is a short-term effort to create a single product or service. Projects generally contain constraints and risks concerning cost, schedule or performance result.

A well-managed Project Management produces good outputs and helps to stand for the sequence of actions which are performed by the project manager. The challenging activities for a project manager are successfully planning, controlling, coordinating, risk management and changing scope (Constanta, 2005; Mike, 2007). Duncan (1996) defines project management as "the applications of knowledge, techniques, skills and tools to project activities in organizing to meet or exceed stakeholder requirements and expectations". Meeting or exceeding stakeholder (client or customer) needs and expectations more often than not involves balancing competing demands among: Scope (project objectives), time, cost and quality Stakeholders with differing needs and expectations Identified requirements (needs) and unidentified requirements (expectations) (Van, 1998) are of the opinion that

project management is "a set of principles, methods, tools and techniques for the project management of objective-oriented work in the context of a specific and unique organizational environment". Verma (1995) states that project management is the "art of directing and coordinating human and material requirements throughout the life of a project to achieve project objectives within specified constraints".

2.2   Project Management Best Practices

A best practice is a technique, method, or process that is believed to be more efficient and effective in achieving a goal than any other techniques, methods and processes, when applied to a particular condition or circumstance. For a best practice to be really beneficial it is important that the group of stakeholders accepting it to be as large as possible. Here, an important role is played by the leader who should be able to send powerful messages to the stakeholders (Nastase, 2009).For technological standards such as Information Technology standards, a document is often used to delineate the essence or characteristics of physical artifacts, algorithms, or processes (Crawford, 2008). Such document text may be complicated but people can easily overcome cultural and language obstacles as soon as they understand the content of this document. However, in the context of developing a standard for project management, the vast majority of different project and human factors involved in coordinating team members in completing these projects makes it extremely difficult to achieve a unanimous understanding of how can project management is "best" conducted in reality. So it is natural to see the fact that the current standards in the marketplace are usually the end results of tough political negotiations by various professional associations (Crawford, 2008). Whereas standards are expected to be objective, definitive and robust, guidelines issued by professional bodies are open to interpretation (Ahlemann, 2009). Benchmarking against leading companies has resulted in significant success for average organizations in improving their performance (Luu, 2008). However, sometimes guidelines become standards, such as PMI's project Management Body of Knowledge, which became an ANSI norm in 2004 (Ahlemann, 2009).

Best practices may be described as optimum ways of performing work processes to achieve high performance (Bogan, 1994; Zairi, 1996). While much of the best practice literature addresses best practices in the context of competition where organizations benchmark against the best, world class organizations for targeted processes such as new product performance (Cooper, 1998) or a human resource management process such as training (Bassi, 1997), there is also the context of internal benchmarking. "Great companies compete against themselves. They may be the best but they are never good enough, they can always become better (MnLagan, 1997; Mirabile, 1997).

(O'Dell, 1998) devote a book to methods for the internal transfer of best practices rather than focusing on benchmarking against external organizations. Similarly, Toney and Powers Toney (1997) examined best practices in a project management benchmarking study of Fortune 500 companies.

Best practices do not emerge from a vacuum, rather, an organizational culture must exist that values and nurtures best practices (Cooper, 1998). One key element is the existence of competencies where competencies may be seen as a set of knowledge, skills, and abilities competencies; a task or activity competency; an output competency; and a result competency?

Wideman (1999) defines a practice as "a way of doing things" (PM Best Practices, 2001). A best practice is defined as "a strategy, approach, method, tool or technique that is particularly effective in helping an organization its objectives for managing a project".

A study by Pfeiffer (1994) showing that the other things being the same; use of best practice can lead to competitive improvement for a solid project management. Best practice means adopting management practices of the most successful organizations through benchmarking. The best practices for project management are required to develop (Smith and Haar, 1993).

3   Methods

A survey questionnaire was selected as measuring instrument for this case study, the reasons for which will be described in more detail below. Welman and Kruger (1999) state that survey questionnaires may be used to obtain the following types of information from respondents such as biographical particulars, typical behavior, opinions, beliefs and convictions and attitudes

In order to conduct surveys, firstly, the questions for the respondents need to be assembled in a structured questionnaire. Secondly, the questionnaires are sent to the respondents with the request to complete the questionnaires and return by hand. An alternative method of distribution was, however, used for this research, namely via electronic mail. In conducting this research great care was taken to understand and be familiar with any and all of the regulations associated with the fields of the study. It was extremely important to protect the rights of the participants.

For the purposes of this survey questionnaire, closed-ended questions were used, structured questions that provides for selecting a response from the four alternatives. The research populations selected for the research are considered to be experienced project managers/ co-coordinators, whom are accustomed with project management terminology. The questions were formulated using words and concepts with which the respondents are familiar. For some questions, technical terms (jargon) had to be used, to enhance the objectivity of the expected responses. However, where such technical terms were used in the questions, the terminology was explained in more common (clear) language, using parentheses.

Observation is another data collection method used in this study. Since myself is the employee of this selected organization, was observing the project managers, project team, project engineers how they are plan and manage the projects for a few months. Beside this informal interview conducted with the project managers and project leads to identify and get to know more about the project process and best practices adhered through the project. Specifically observation conducted one project list which they are involved and current project progress and status updates. Beside this also selected company using clarity for the project which will help to track the

project history up to date. As a project team member use to attend several project team meeting and get to know what's happening there

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4 Findings

The questions and responses to each question are presented as a percentage of the total respondents. Figures and graphs have been used to facilitate the presentation of the research results. The data analysis will be completed using SPSS software generating related analysis and also excel sheet calculations. SPSS is a computer program used for survey authoring and deployment (IBM SPSS Data Collection), data mining (IBM SPSS Modeler), text analytics, statistical analysis, and collaboration and deployment. Descriptive statistics in SPSS will help to produce several type graphs which help in this research and able to conclude.
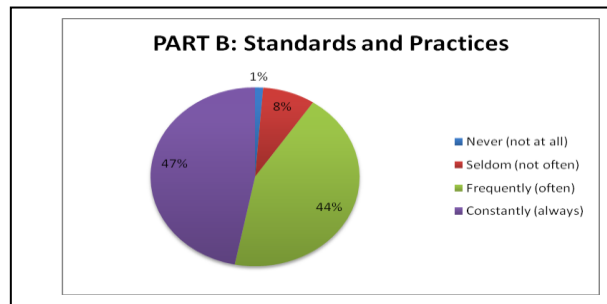

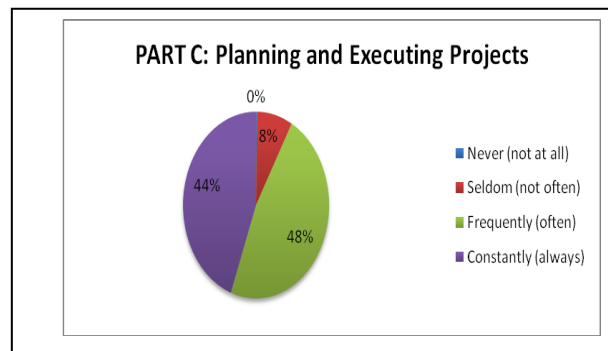Figure: 1.1: PART B: Standards and Practices result

Figure 1.2: PART C: Planning and Executing Projects

Figure 1.1 shows the majority of respondents from IT organization are following Project Management standards and practices which is 47% and 44% for constantly and frequently. Only 1% of respondents are chosen never. Beside that 8% respondents are chosen seldom an option. Both frequent and constantly are highest chosen by respondents which practicing the project management standards and practices. Figure 1.2 shows majority of respondents from IT organization are following Project Management Planning and Executing process which is 48% and 44% for constantly and frequently. 0% of respondents are chosen never. Beside that 8% respondents are chosen seldom an option. Both frequent and constantly are most that respondents practicing the project management planning and executing projects.

It is clear from the research results that the standards and processes in the organization are well-established, in relation to its project planning methodologies, processes being documented, and the availability of templates. Depending on the size and extent of the multiple projects, this could either be seen as being the optimal utilization of the available project managers, or it could be perceived that some of them are overloaded. If the latter is the case, then it could be to the detriment of the projects, as it will mean that the project manager will be forced to share time and effort between two or more projects.

There should be a natural relationship between these two factors if the assumption is made that managing multiple projects require multiple resources which means that by default, resources have to be shared amongst the projects. Alternatively, it could be a condition of limited resources that is commonly experienced in most project environments. The results for the general methods/procedures applied during the planning and execution of projects compare favorably with the best practices. The majority of the respondents said that risks have identified proactively during the planning phase of the projects. In most cases, risks impact negatively on the time and cost goals of a project. It is, therefore, advisable that preventive and/or contingent actions for potential risks are developed proactively (during planning) in order to reduce the probability and seriousness of the risks

5 Conclusion

Through the study we have found that standards are not objectives and norms but they are tools for achieving project goals. The successes of project portfolios depend on the power of the user in interpreting the contents of a standard in different and specific situations. The organization's culture is a key issue in acceptance and improvement of standards.

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